

FIG.1A

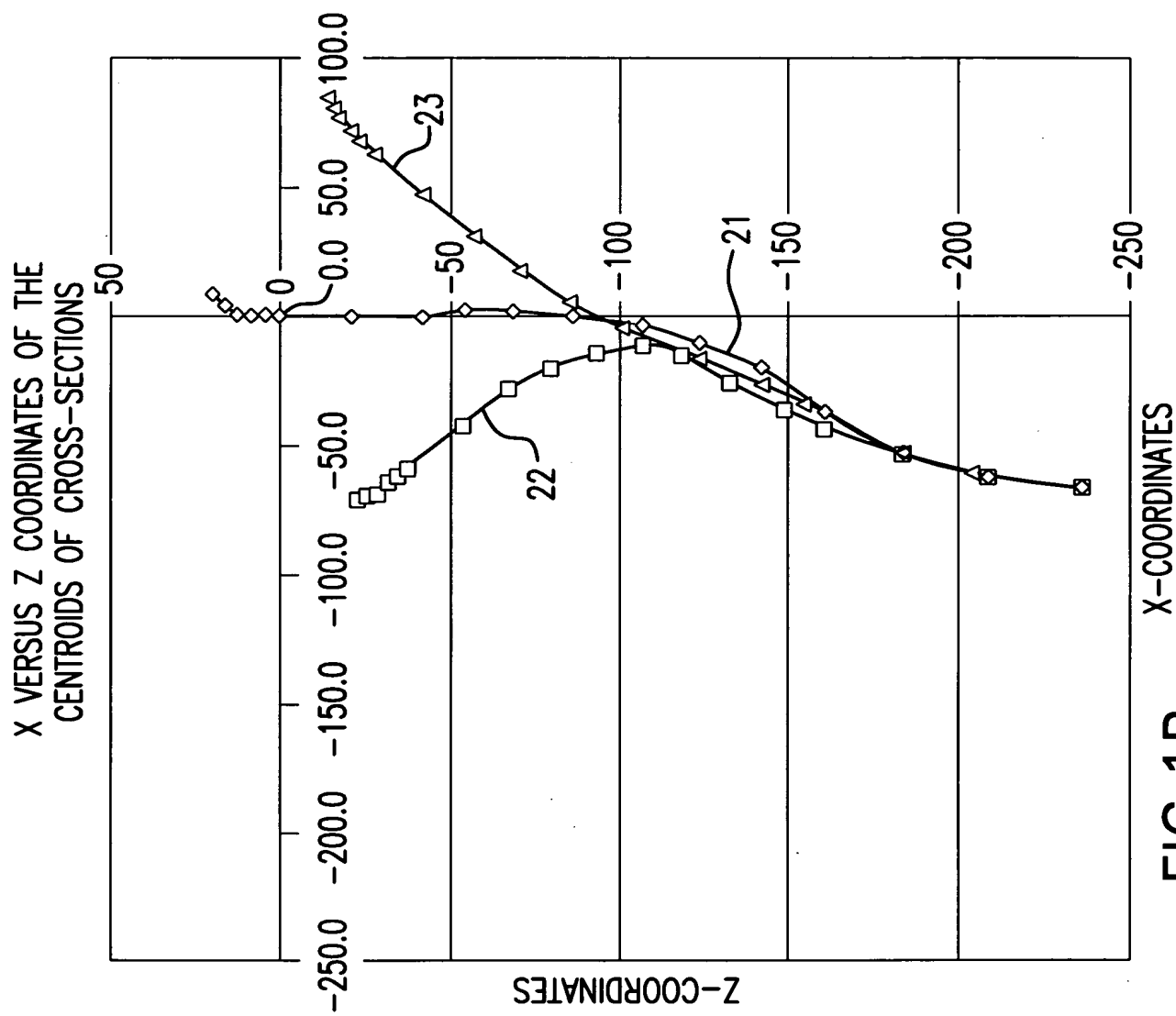


FIG.1B

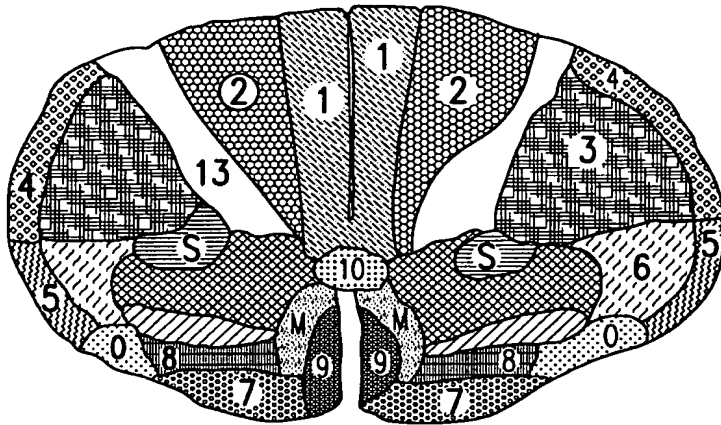


FIG. 2A

1. FASCICULUS GRACILIS
2. FASCICULUS CUNEATUS
3. CORTICOSP + RUBROSP. TRACTS
4. DORSAL SPINO-CEREBELLAR
5. VENTRAL SPINO-CEREBELLAR
6. LAT. SPINOTHALAMIC TR.
7. ANT. SPINOTHAL TR.
8. TECTOSPINAL LATERAL + VESTIBULOSPINAL TRACTS
9. ANTERIOR CORTICOSP TR. RETICULO SP.
10. ANTERIOR WHITE COMMISSURE
12. VENTRAL GRAY
- M MEDIAL LONGITUDINAL FASCICULUS
- O SPINO-OLIVARY TR.
- R RETICULOSPINAL FIBERS
- S INTERMEDIOLATERAL CELL COLUMN (DESCENDING AUTONOMIC FIBERS)

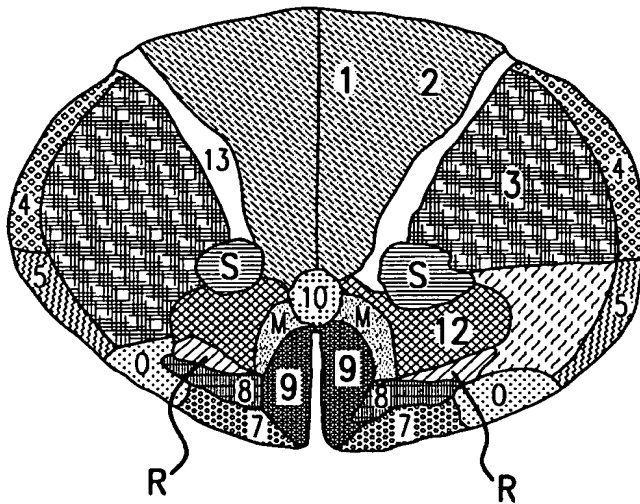
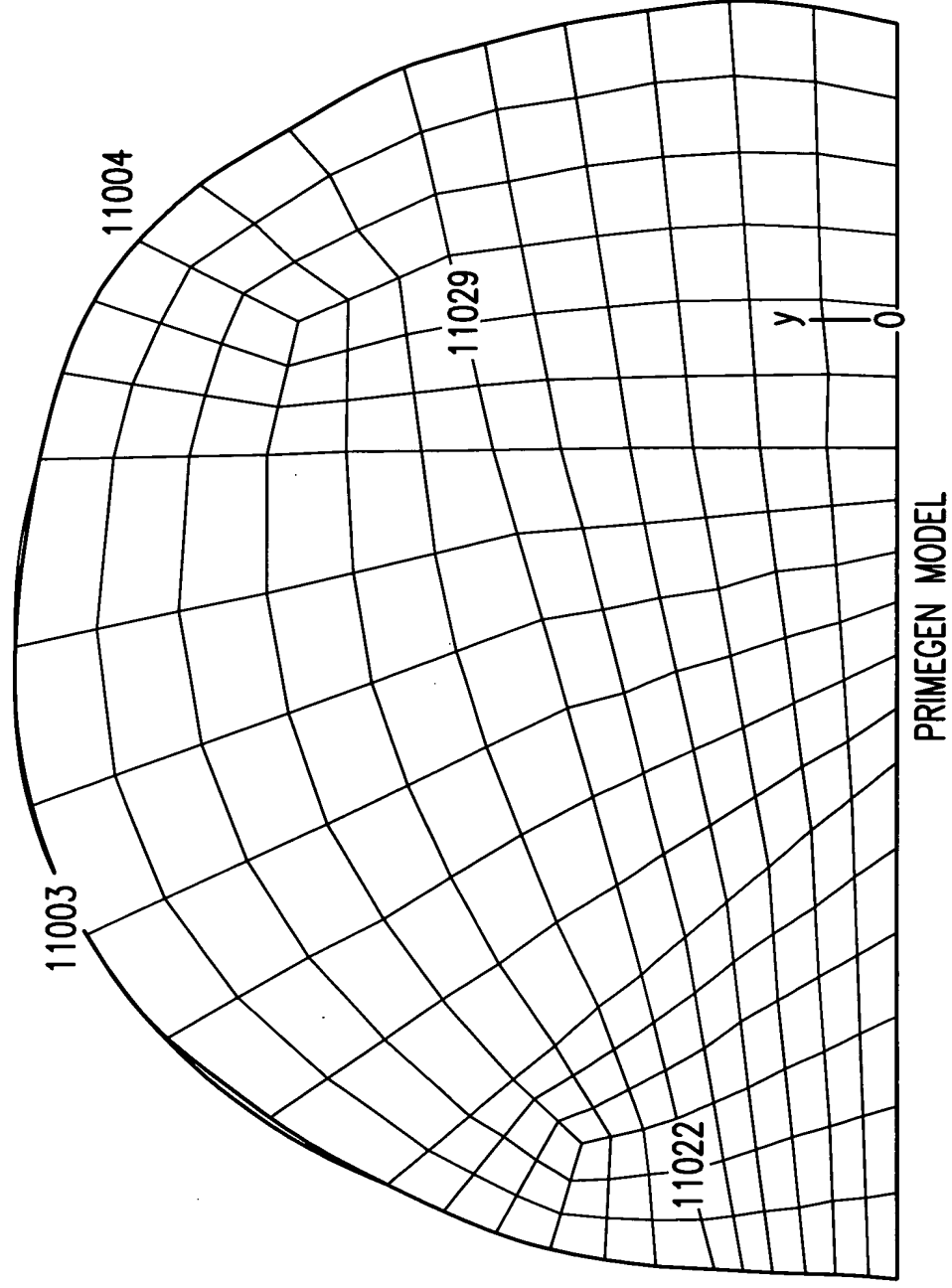


FIG. 2B

FIG. 3

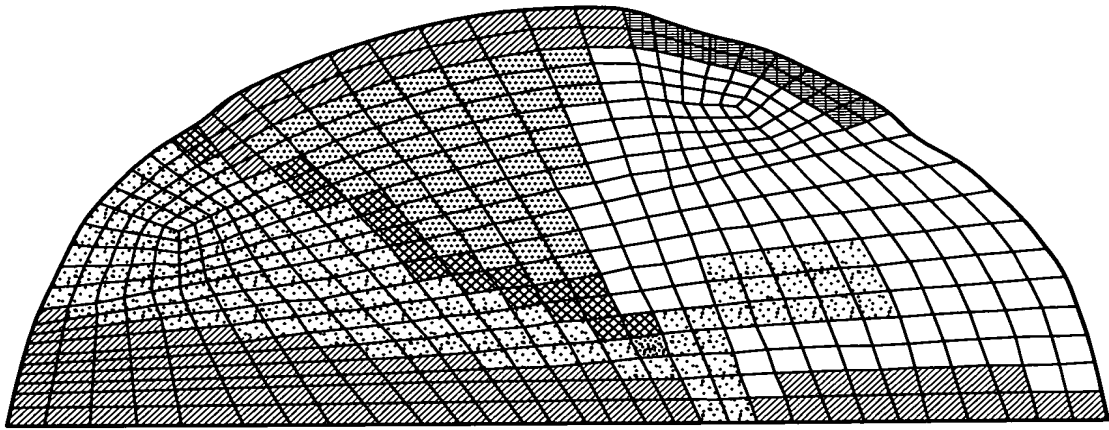
PARAMETRIC FINITE ELEMENT MODELING



CROSS SECTION; FINITE ELEMENT REGIONS

FIG.4

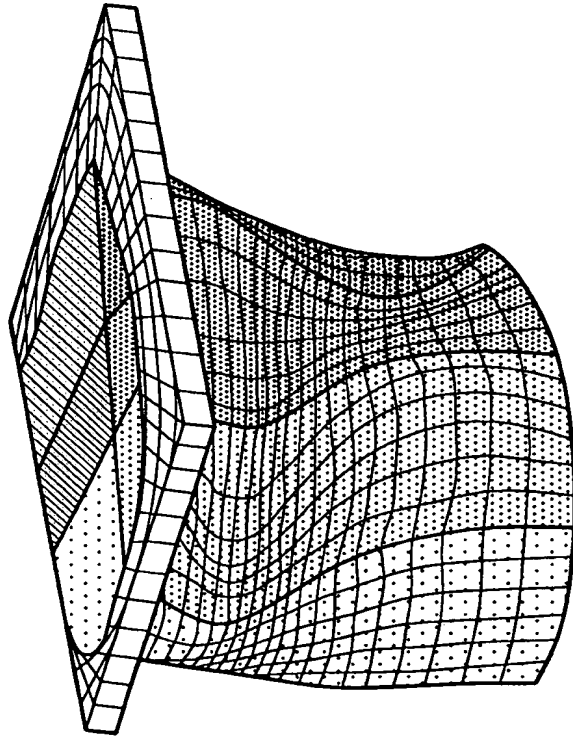
PARAMETRIC FINITE ELEMENT MODELING



SAMPLE NEUROLOGICAL FUNCTION MAP

FIG.5

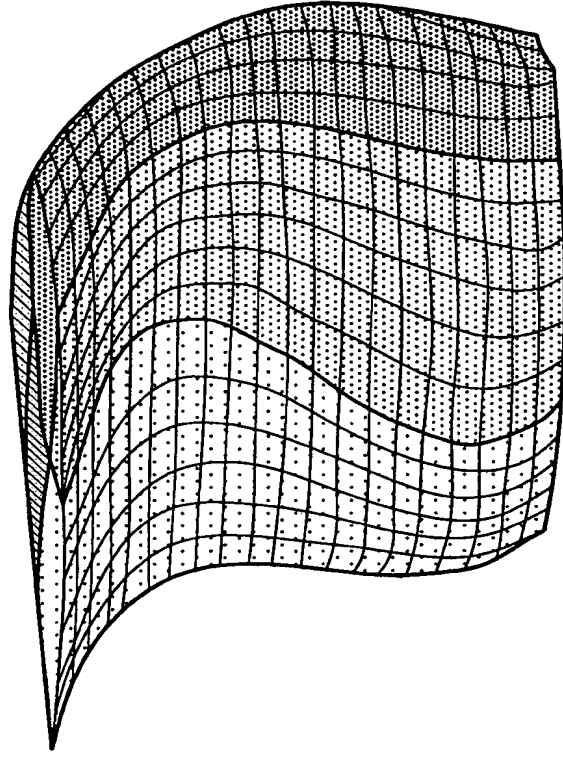
MEDULLA



PRIME EXTRUDED SPINAL VOLUMES

FIG. 6A

UPPER CERVICAL



PRIME EXTRUDED SPINAL VOLUMES

FIG. 6B

LOWER CERVICAL

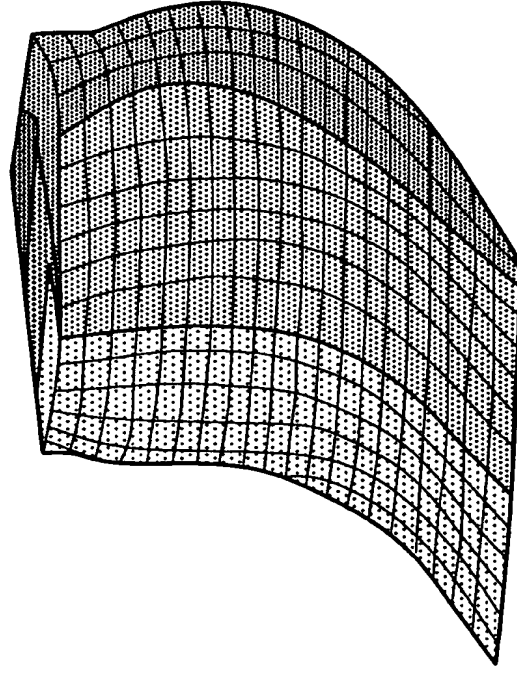


FIG.6C

UPPER THORACIC

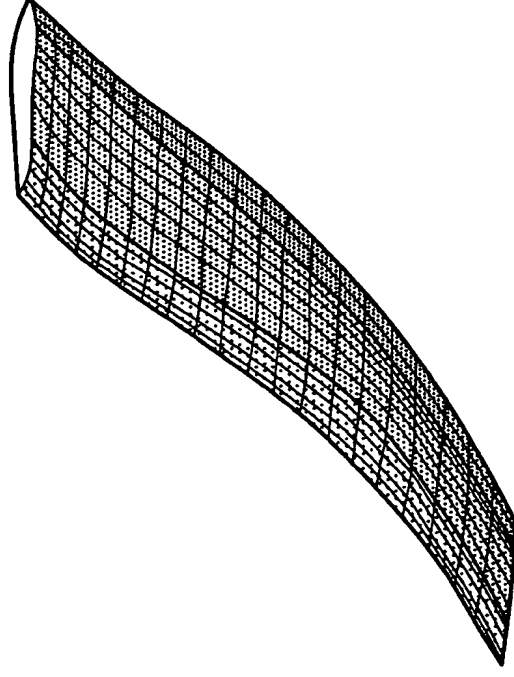
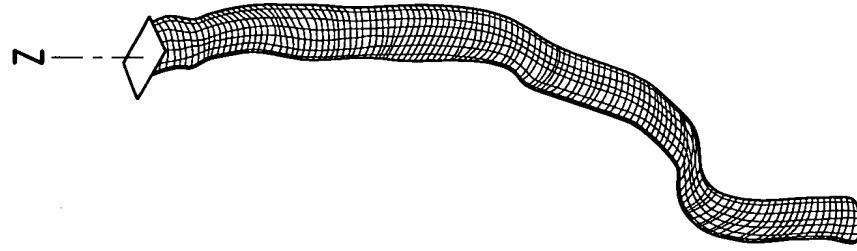


FIG.6D

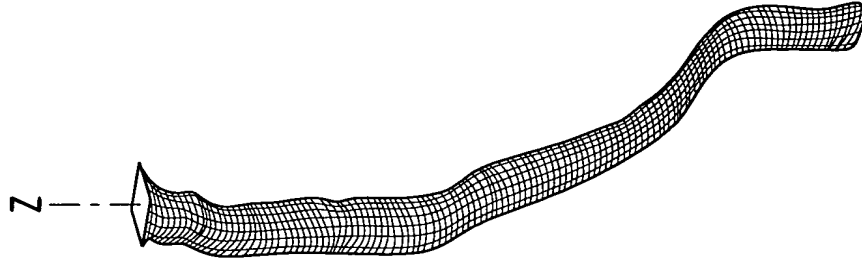
PARAMETRIC FINITE
ELEMENT MODELING



FULL SPINAL
CORD MODEL

FIG.7A

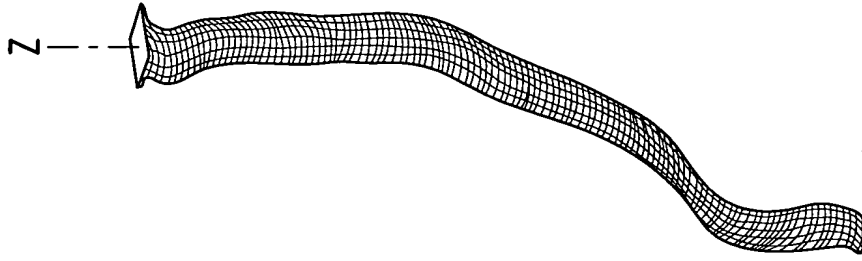
PARAMETRIC FINITE
ELEMENT MODELING



FULL SPINAL
CORD MODEL

FIG.7B

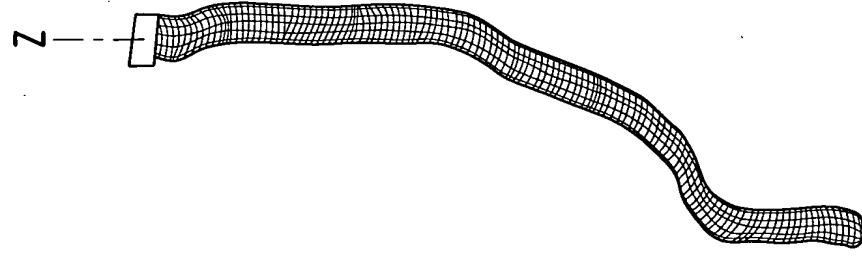
PARAMETRIC FINITE
ELEMENT MODELING



FULL SPINAL
CORD MODEL

FIG.7C

PARAMETRIC FINITE
ELEMENT MODELING

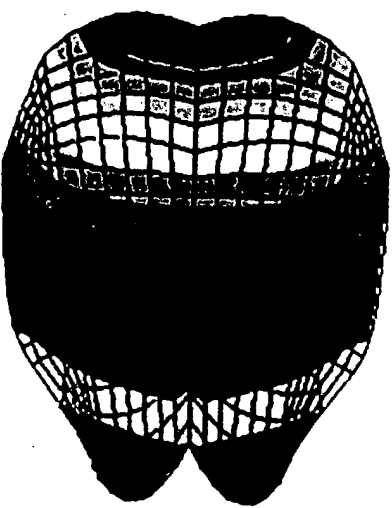


FULL SPINAL
CORD MODEL

FIG.7D

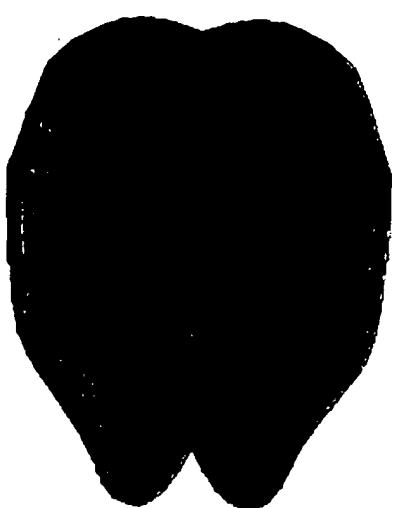
3Z
CONTOUR FILL

- -1.0000E-02
- -5.2632E-03
- -5.2632E-04
- 4.2105E-03
- 8.9474E-03
- 1.3684E-02
- 1.8421E-02
- 2.3158E-02
- 2.7895E-02
- 3.2632E-02
- 3.7368E-02
- 4.2105E-02
- 4.6842E-02
- 5.1579E-02
- 5.6316E-02
- 6.1053E-02
- 6.5789E-02
- 7.0526E-02
- 7.5263E-02
- 8.0000E-02



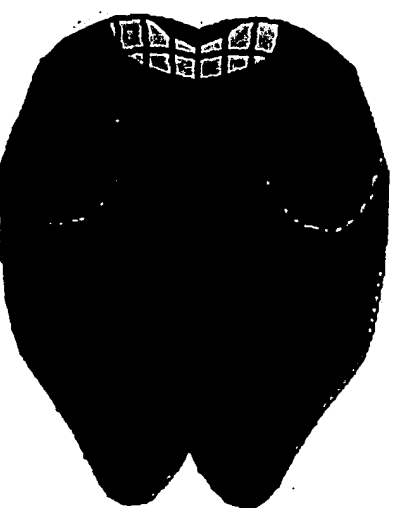
MEDULLA 3 (svm)

FIG. 8A



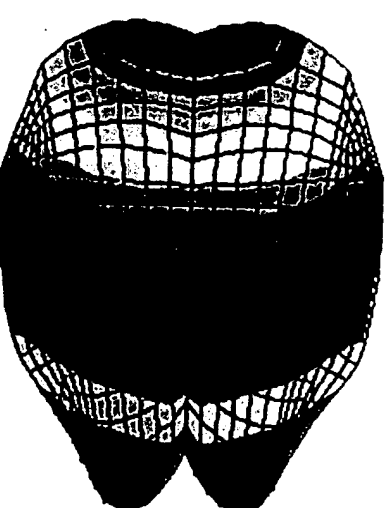
MEDULLA 3 (sx)

FIG. 8B



MEDULLA 3 (sxz)

FIG. 8C

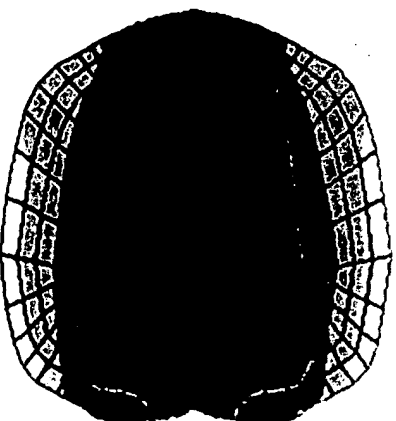


MEDULLA 3 (sz)

FIG. 8D

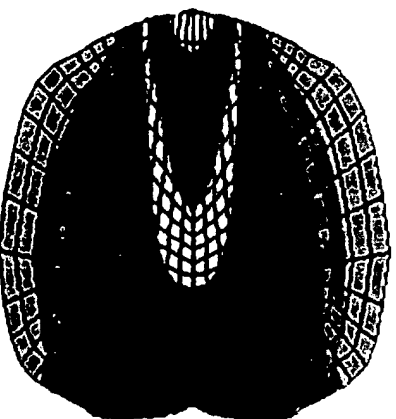
CONTOUR FILL

- sz
- -2.5000E-01
 - -5.2474E-01
 - -1.9947E-01
 - -1.7421E-01
 - -1.4895E-01
 - -1.2368E-01
 - -9.8421E-02
 - -7.3158E-02
 - -4.7895E-02
 - -2.2632E-02
 - 2.6316E-03
 - 2.7895E-02
 - 5.3158E-02
 - 7.8421E-02
 - 1.0368E-01
 - 1.2895E-01
 - 1.5421E-01
 - 1.7947E-01
 - 2.0474E-01
 - 2.3000E-01



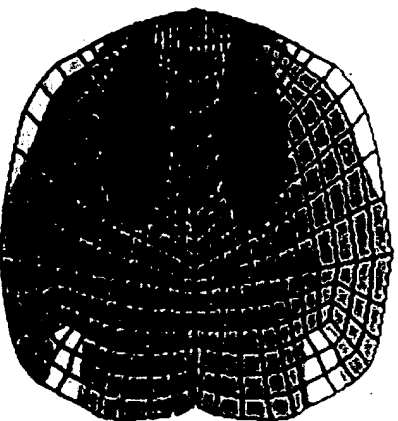
MEDULLA 3 (svm)

FIG. 9A



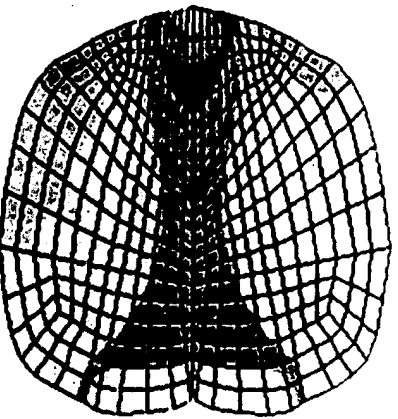
MEDULLA 3 (sx)

FIG. 9B



MEDULLA 3 (sxy)

FIG. 9C



MEDULLA 3 (sz)

FIG. 9D